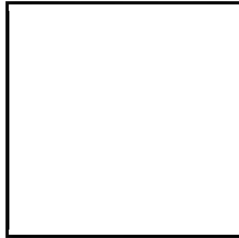


000 - 1850-66

18 April 1966

25X1A

To:



From:

Subject: INLET AND OUTLET SUIT VENT AIR TEMPERATURE MEASUREMENTS

During our last visit [redacted] we agreed to obtain measurements of the actual suit vent air, both for the inlet and outlet valves. [redacted] has agreed that he can supply the instrumentation to do this and the attached prints show that installation.

25X1A

25X1A

We have made this as a flight test SAM since it is instrumentation work only. We will provide any parts that you desire if you or Bob will advise us which ones.

Everyone would like to see these measurements made as soon as possible since they are crucial in determining exactly what kind of a problem the pilot has in the cockpit in regard to heat and temperature discomfort. We would hope to make measurements on several pilots and several airplanes in order to get data that can be completely evaluated. If this is done immediately we will have temperature data on the present non-insulated suits which can be compared to data obtained from insulated pressure suits which should be arriving [redacted] in the next week or two.

25X1

25X1A



meb

25X1A

cc:



(w/e) ✓

Engineer: 25X1A

Spares: 1

Proj. Off.

Date:

FOR SHIP/EQPT. SERIAL NO. 125 127 128 129 130

127, 131, 132

TITLE: INSTRUMENTATION - PRESS

SUIT VENT AIR TEST

PURPOSE:

TO ACQUIRE TEMPERATURE  
DATA ON SUIT VENT AIR

WHEN TO BE DONE:

☐ Mandatory -  
Safety of Flight☐ At Convenience☒ Other

Work Completed

Date: \_\_\_\_\_

Foreman: \_\_\_\_\_

Inspector: \_\_\_\_\_

KIT

Ref. Dwg. No. \_\_\_\_\_

E&amp;M Manual, pp. \_\_\_\_\_

Approx. Date Kits Available at BW-1: \_\_\_\_\_

Est. Manhours

Wt. &amp; Balance Change: \_\_\_\_\_

to Compl. \_\_\_\_\_

Parts Affected	Disposition
DH 208-81-1	100% DUE

Kit Completed by	
Contractor	_____
Date:	_____
Inspector:	_____

## DESCRIPTION OF CHANGE:

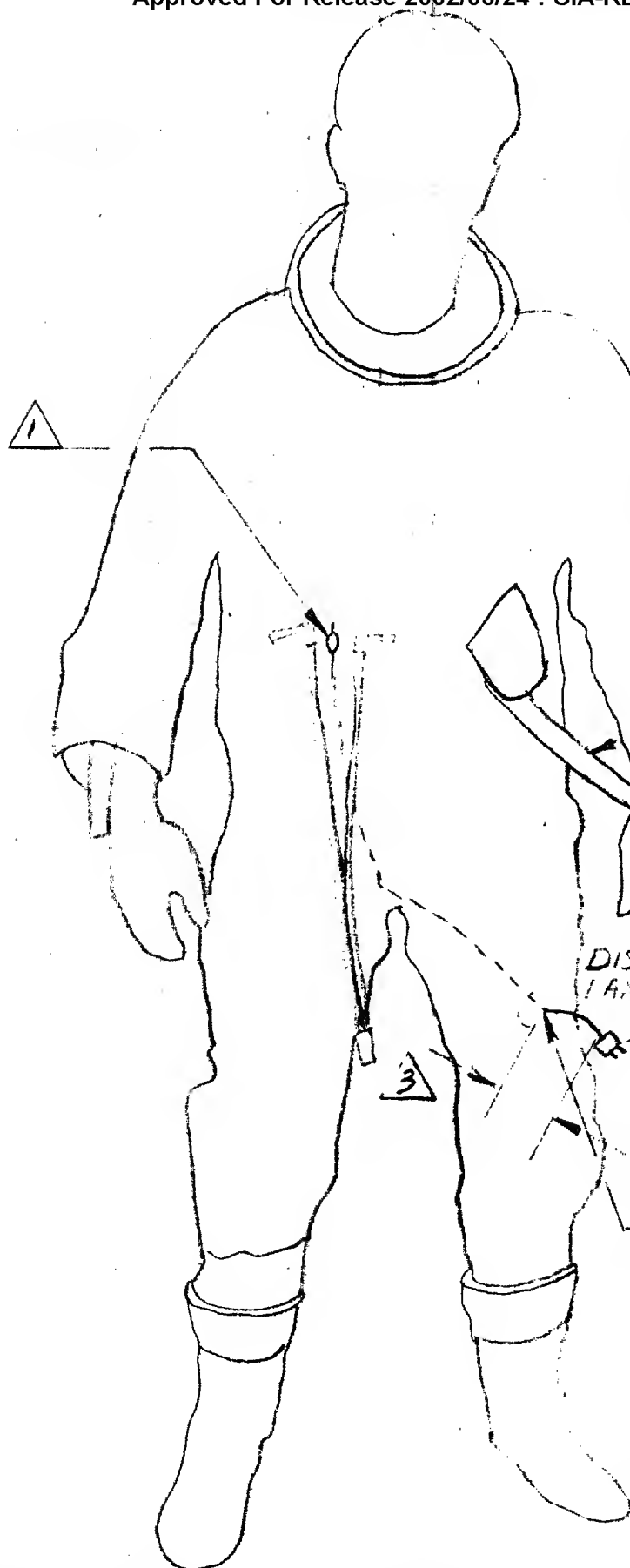
INSTRUMENTATION TO BE ADDED BY: -

(A) PRESS SUIT ~

(R) AIRPLANE ~

ALL PARTS AVAILABLE

25X1A



1 ADD THERMOCOUPLE  
PER E. KORBIN & GATINEAU  
AT BN-3. LOCATE INSIDE  
SUIT AT SUIT CONTROLLER  
OUTFLOW VALVE PER P.  
BANKS AT BN-3. FLIGHT  
OPERATION

2 EXIT AT ALTIMETER  
FITTING. EPOXY  
AROUND HOLES TO  
SEAL AGAINST AIR  
LEAKAGE. DRILL MIN.  
HOLE SIZE

2. 20.5-10.5 INCH  
AMO  
DN20-1/2-1  
ELBOW - 1 REQ.  
DRILL 1/4" DIA.  
HOLE INSERT  
THESE  
EPOXY TO SEAL  
LOCATE OUTSIDE  
DISCONNECT  
1/4" DIA.  
TYPE 4000 PLUG  
THREAD PLUG  
ADJUST PLUG & WASH  
3.00 JACK TO MAX. RELEASE  
FORCE OF 10 LBS.  
ROUND EXPOSED  
CORNER SEE FTAQ 7  
SHEATH WIRE TO  
PREVENT FAILURE OF  
WIRE AND INSURE 100%  
DURING PILOT'S LEG  
MOVEMENT. AVAILABLE  
AT BN-3

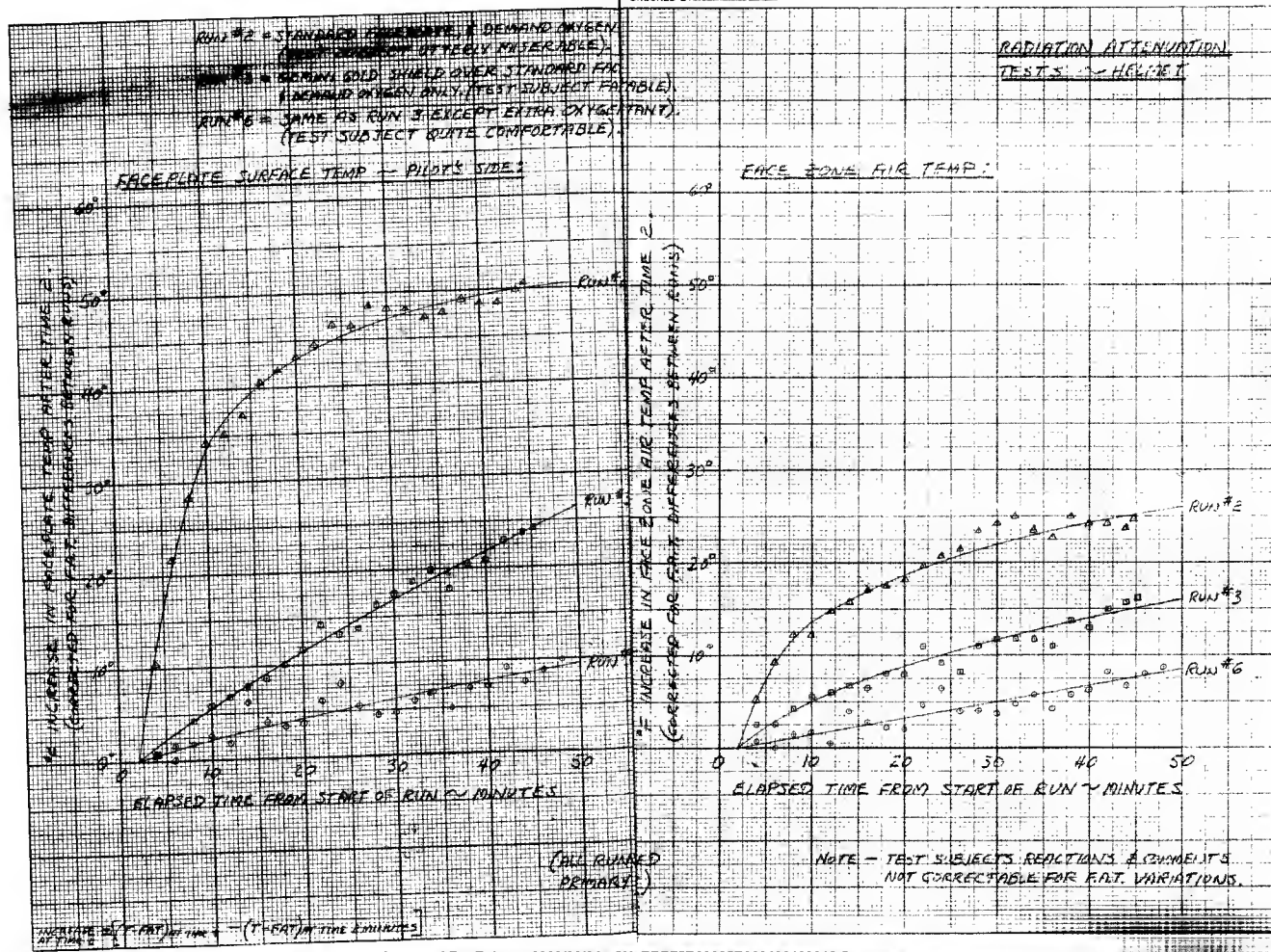
3 NOTE: MOCKUP AND CHECK LEAKS  
WITH PILOTS BEFORE  
MAKING CHANGES

FTAQ 3  
INSTRUMENTATION 25X1A  
DRESS & T LIA TEMP.

PREPARED BY [REDACTED]  
DATE 5-2-60  
CHECKED BY [REDACTED]

LOCKHEED CALIFORNIA COMP  
A DIVISION OF LOCKHEED AIRCRAFT CORPORATION

PAGE  
MODEL  
REPORT NO

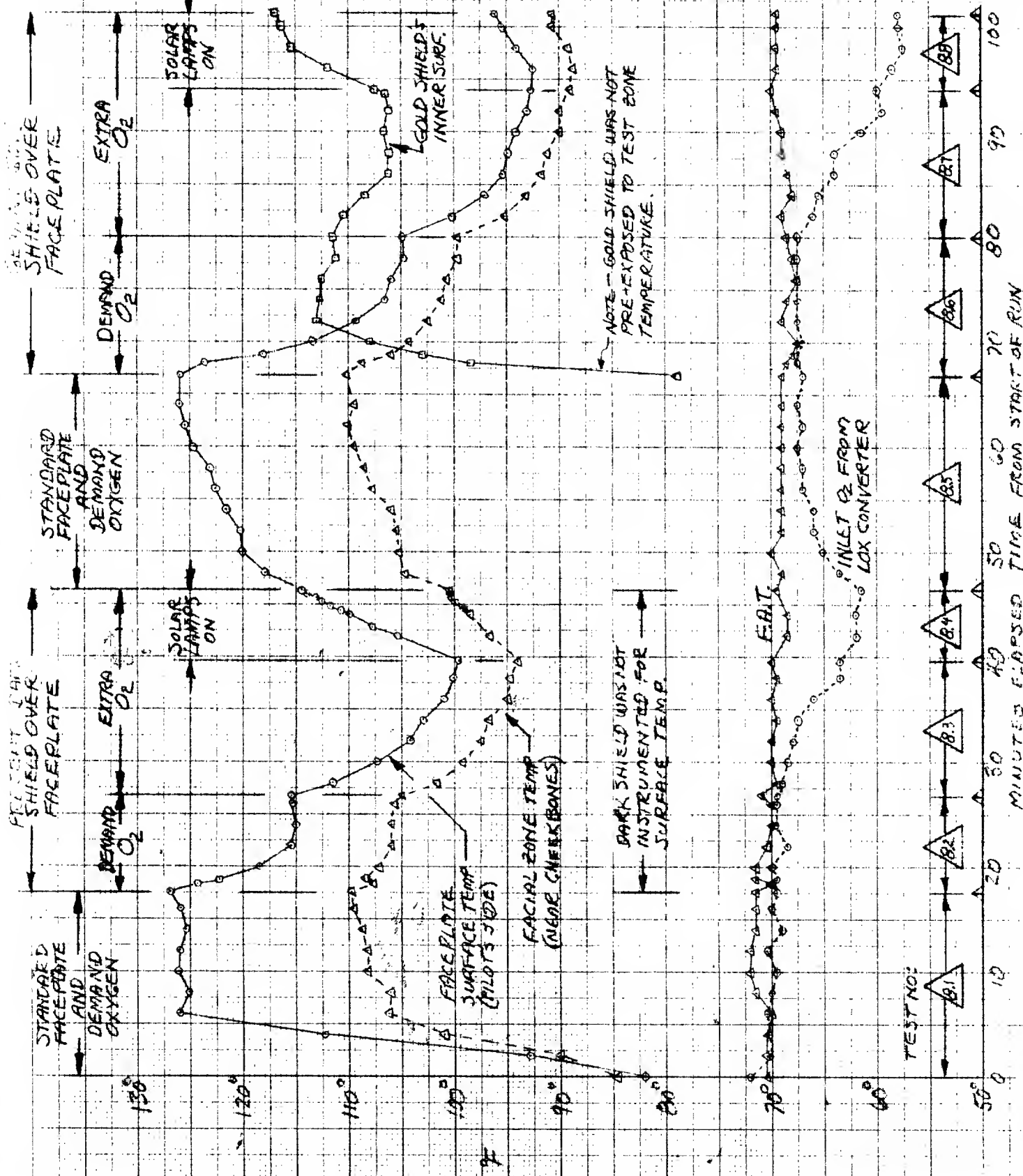


# RADIATION ATTENUATION TEST ~ HELMET

25X1A

RUN #8 OF 3-8-66, WITH SEQUENTIAL IMPROVEMENTS APPLIED. TEST SUBJEC

(PRIMARY SPRAY-BAR ONLY)



DATE \_\_\_\_\_

2-24-66

A DIVISION OF LOCKHEED AIRCRAFT CORPORATION

## MODEL

CHECKED BY J

Approved For Release 2002/06/24 : CIA-RDP75B00285R000400130018-5 REPORT NO.

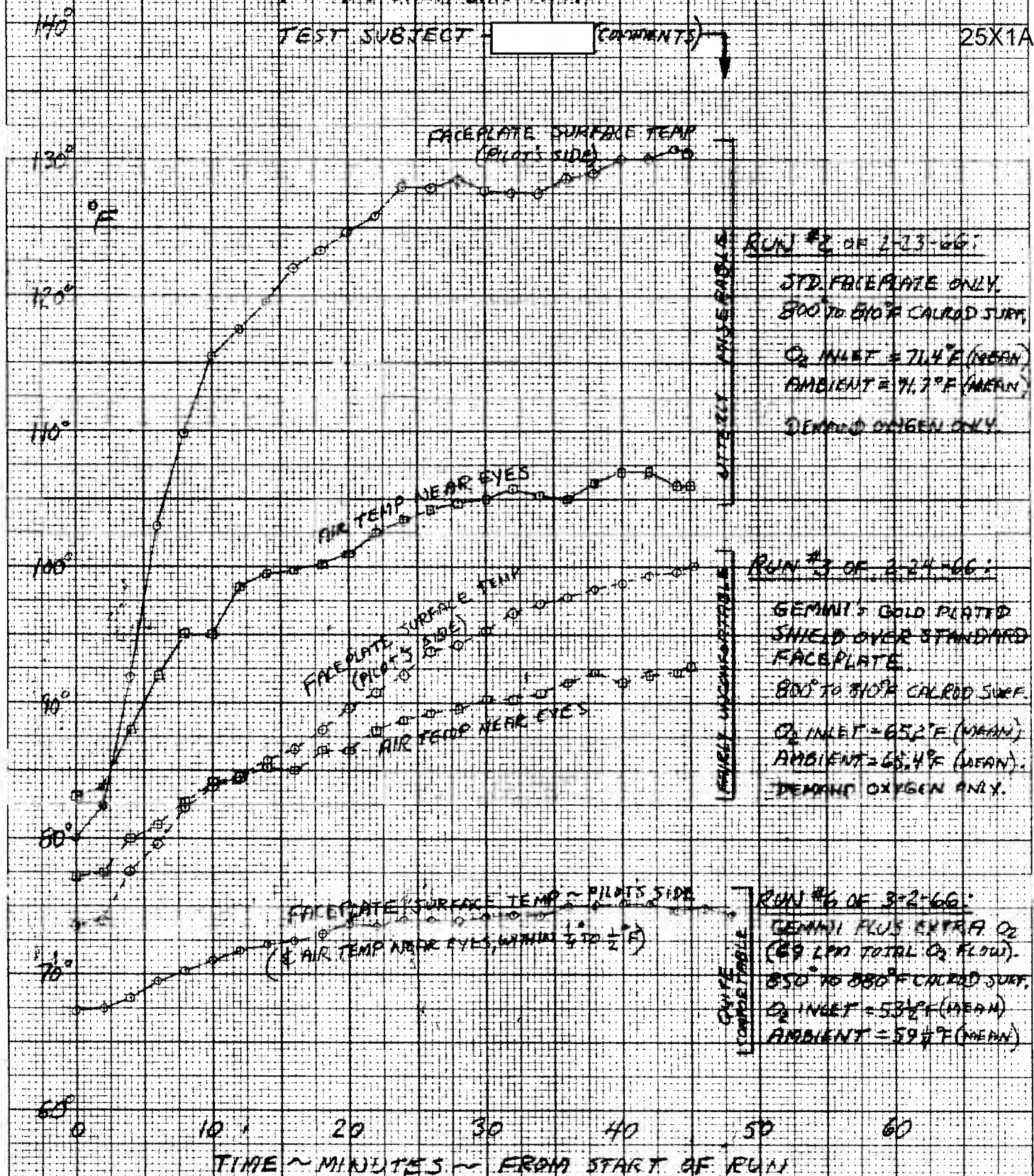
5 REPORT NO.

## RADIATION ATTENUATION TESTS - HELMET

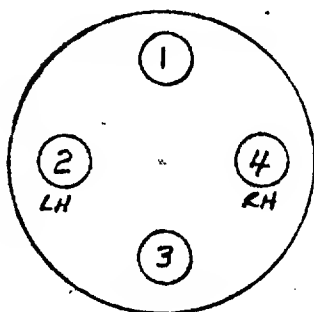
THESE RIVETS MADE WITH LOX CONVERTER  
PRIMARY SPRAY BAR ONLY.

TEST SUBJECT	COMMENTS

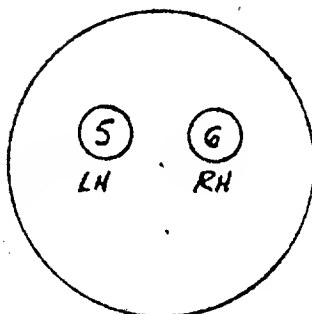
25X1A



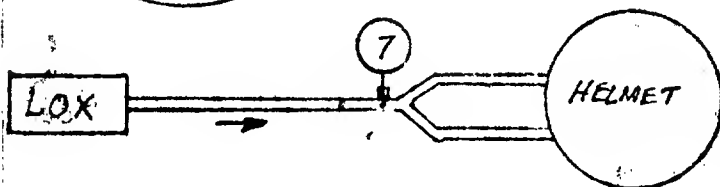
# THERMOCOUPLE LOCATIONS - HELMET RUNS



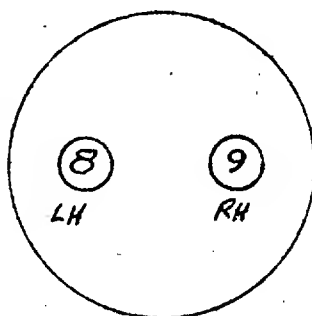
INNER SURFACE OF  
FACEPLATE PROPER  
(VIEW LOOKING OUT  
FROM SUBJECT'S FACE)



AIRSPACE WITHIN  
FACEPLATED ZONE  
(NEAR CHEEKBONES)



O<sub>2</sub> TEMP TO  
HELMET



INNER SURFACE OF  
OUTER GOLD SHIELD

⑩ UNUSED

⑪ ICE BATH

⑫ AMBIENT AIR TEMP  
AT BROWN RECORDER

DBC

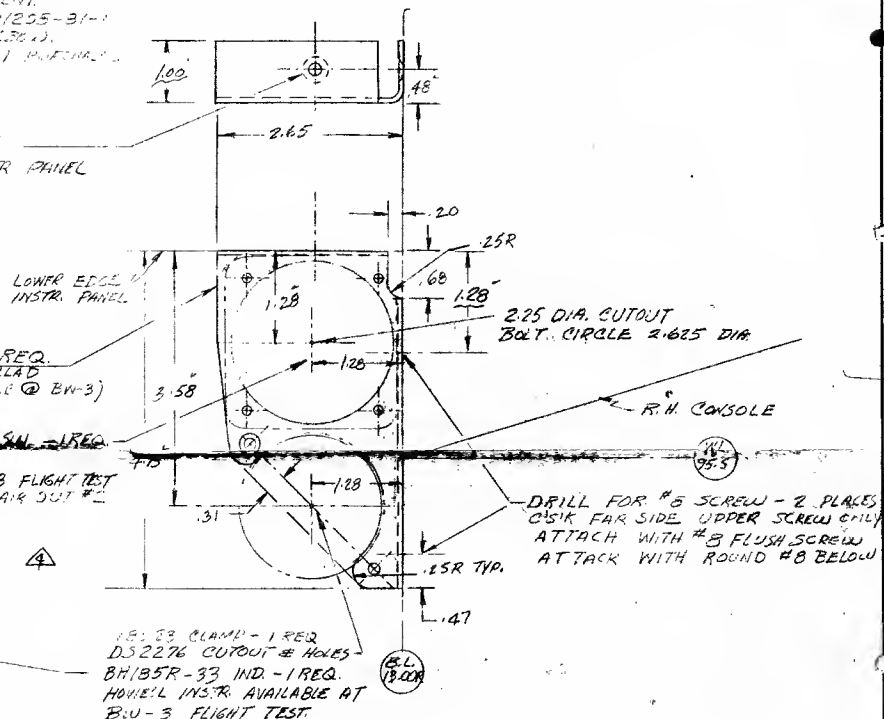
V	TO	DATE	LET.	CHANGE	SERIAL	DTM
1	TO	SAVE				

- 1 OMIT
- △ DETERMINE LENGTH FROM MOCKUP WITH PILOT SITTING IN THE AIRPLANE. SHEATH OUT 1" TO PREVENT FAILURE OF WIRE AND ISOLATION FROM PILOT'S LEG MOVEMENT DURING RUDDER ACTIVATION 12.
- △ DETERMINE LENGTH FROM SEAT VERTICAL ADJUSTMENT. SEE FTAQ 6 FOR THERMOCOUPLE INSTALLATION IN DN205-31-1 ELBOW. WELD THERMOCOUPLE IN EXISTING 3/4" ELBOW. REPLACE WELD AFTER TEST WITH NEW DN205-31-1 MATERIAL. IN A170 51948.

5. COORDINATE ALL INSTRUMENTATION ON SUIT & AIRPLANE WITH [REDACTED] BW-3, INSTRUMENTATION

△ @ BOTTOM OF PAGE

BACK C/S/K  
PICKUP INSTR. PANEL  
SCREW



JMS5 JACK - 1 REQ. AVAILABLE AT BW-3. MAKE WITH FRED. INT. PLUG. ADJUST PLUG TO SEPARATE A. 10.233. MAX. SEE DETAIL.

RATON THERMOCOUPLE SW. - 1 REQ. LEVIO ENGINEERING AVAILABLE AT BW-3 FLIGHT TEST. VENT AIR IN #1, VENT AIR OUT #2. DN205-31-1 (RER) SEE FTAQ 6 FOR THERMOCOUPLE INSTL. 4.

RUN CABLE ON FLOOR & SIDE CONSOLE COVER WITH HEAVY TAPE.

DETAIL A (FULL SIZE)

INSTALL ON 5/H 125, 127, 128, 129, 130  
121, 121, 122

LOCKHEED-CALIFORNIA COMPANY A DIVISION OF LOCKHEED AIRCRAFT CORPORATION ADVANCED DEVELOPMENT PROJECTS		NO. REQ.	MODEL	NEXT ASSEM.
MPG. PER LAC PROCESS SPEC. IN FINISH AS NOTED		REQUIREMENTS PER SHIP		
TOLERANCES EXCEPT AS NOTED XX ± .00 XXX ± .005		DRAWN		
SCALE		MATERIAL		
FORM 709-52		APPROVED		

INSTRUMENTATION  
PRESS. SUIT  
VENT. A.F.  
FTAQ 7

